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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kristin Wannerberger

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EXAMINER

PALENIK, JEFFREY T

ART UNIT

PAPER NUMBER

1615

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,715	<b>Applicant(s)</b> WANNERBERGER ET AL.	
	<b>Examiner</b> Jeffrey T. Palenik	<b>Art Unit</b> 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,7 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,7 and 13-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6 Nov 2009</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### **STATUS OF THE APPLICATION**

Receipt is acknowledged of Applicant's Request for Continued Examination (RCE), Amendments, Remarks and Declaration filed 6 November 2009. Said documents are entered on the record. The Examiner further acknowledges the following:

Claim 17 has been added. Support for the addition of the limitations is provided.

Claims 1, 3, 4, 15 and 16 have been amended. Claims 1, 3, 4 and 15 have changed agent to acid. Claim 1 adds the limitation of granulate. Claims 3 and 16 are amended to correct the dependency.

Claim 5 is newly cancelled.

No new matter has been added.

As such, claims 1, 3-4, 6-7 and 13-17 now represent all claims currently under consideration.

### **INFORMATION DISCLOSURE STATEMENT**

One Information Disclosure Statement (IDS) filed 6 November 2009 is acknowledged and has been considered.

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### **WITHDRAWN OBJECTIONS/REJECTIONS**

#### Objection to the Claims

Applicants' amendment to claim 3 correcting the dependency of the claim to claim 1 rather than the cancelled claim 2 is sufficient enough to render the objection **moot**.

#### Rejection under 35 USC 112

Applicants' amendments to claims 1, 3, 4 and 15, as discussed above, render moot the scope of enablement rejection, under 35 USC 112, first paragraph. Thus, said rejection has been **withdrawn**.

### **MAINTAINED REJECTION**

The following rejection is maintained from the Final Office Action dated 7 May 2009:

### **CLAIM REJECTIONS - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-7 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fein (US Pre-Grant Publication N° 2004/0138098).

The instantly amended claim 1 is directed to a blister pack which comprises a compressed tablet. Said tablet comprises desmopressin, an agent which provides a pH in the range of 3.0-6.2 when dissolved, and a pharmaceutically acceptable adjuvant, diluent or carrier. With regard to the agent limitation recited in claim 1, which states that it “provides a pH in the range of from 3.0 to 6.2 as measured when 1 g of said tablet is slurried in 2 mL of water at 25°C”; until some material difference(s) in the properties of the composition are demonstrated, said limitation is considered by the Examiner to be directed toward the compressed desmopressin/agent composition, which is instantly claimed. Amended claims 3, 4 and 15 further limit the pH range recited in claim 1 which results from the inclusion of the agent. Amended claim 5 and new claim 16, respectively, further limit the agent to an acid, such as hydrochloric, malic or citric acid. Claims 6 and 14 recite limitations to the material of the blister pack. Claim 7 recites that

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the tablet of claim 1 does not comprise an enteric coating. Claim 13 recites that the tablet of claim 7 does not comprise fish gelatin.

Fein teaches an article of manufacture comprising packaging material and a pharmaceutical composition contained within said packaging material which comprises desmopressin (claim 14). Said pharmaceutical composition is taught as being adapted for different delivery routes such as transmucosal (claim 5) and is further and preferably taught as being formulated into a hard, compressed, rapidly dissolving tablet which is adapted for oral dosing ¶[0040]. Paragraphs [0050] through [0052] teach that when formulated as a rapidly dissolving tablet, an additional component called an “effervescent couple” is used which is defined as a compound which emits gas on exposure to water or saliva ¶[0052]. The effervescent couple is taught as being the reaction product of a soluble acid source and a carbonate source. Such acids which may be used include malic and citric acids. Paragraph [0091] further teaches the inclusion of pH adjusting agents to adjust the pH of a solution from which the dosage form is prepared. Ranges which are targeted are from 3-6, preferably from 3.5 to 5.5 and most preferably from pH 4 to 5 (e.g. 4.5 or 4.8). Citric, hydrochloric and malic acids are expressly taught as the acids with which this adjustment is best accomplished with citric acid being preferred. Paragraph [0086] teaches that the shaped pharmaceutical dosage forms may include ingredients beyond the active agent such as adjuvants or a carrier (see also claim 1). Paragraph [0040], which specifically discusses tablet formulations teaches adjuvants such as a non-direct compression filler, wicking agent and a lubricant. Thus the limitations of claims 1, 3-5, 15 and 16 are expressly taught. Example 1 expressly teaches that blister laminate packaging may comprise PVC coated with PVdC ¶[0119], thereby teaching the limitations of claims 6 and

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14. The teachings of Fein are silent to tablets which have any form of coating, not just enteric coatings, thereby teaching the limitation of claim 7. Lastly, Fein teaches several carrier compounds which may be used as alternatives for fish-gelatin and gelatin in general ¶[0085], thereby expressly suggesting that the tablet need not comprise fish-gelatin, as instantly claimed.

The ordinarily skilled artisan would have been highly motivated to formulate the instantly claimed tablet particularly since Fein expressly discusses the combining desmopressin with citric, hydrochloric or malic acids, for the express purposes of maintaining the pH of the dosage form within the ranges which are instantly claimed. Further motivation would have been derived based on the fact that Fein is not only silent to the use of tablet coatings, but also since numerous alternative carriers to fish gelatin are expressly taught. Containment of tablets and other dosage forms within PVC- and/or PVdC-based blister packaging is well known in the art for the purposes as common as protection and longevity of storage, as evidenced for example, by Remington (pp. 1492-1493). Based on the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, alone or in combination, especially in the absence of evidence to the contrary. It would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have produced a solid dosage formulated as a compressed tablet under the guidance of Fein, contained it within a PVC/PVdC based blister package, also as suggested by Fein, and arrive at the instantly claimed composition.

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### RESPONSE TO ARGUMENTS

Applicants' arguments with regard to the rejection of claims 1, 3-7 and 13-16 under 35 USC 103(a) as being unpatentable over the teachings of Fein et al. have been fully considered but they are not persuasive.

Applicants traverse the rejection based on the following assertions. Applicants initially allege that "Fein's tablets are not compressed granulate tablets as recited in the instant claims, but rather are fast-dissolving tablets formed by direct compression of a mixture of the materials."

To this, the Examiner respectfully disagrees and maintains that Fein's tablet is in fact a compressed dosage form wherein particles (e.g. granules) of the active ingredient and a protective material are provided as a hard, compressed tablet for direct oral dosing ¶[0040].

In response to Applicants' argument that "Fein is directed to forms of desmopressin which are absorbed directly from the mouth instead of being swallowed," a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use then it meets the claim. Furthermore, in response to Applicants' argument that the references fail to show certain features of the instant invention, it is noted that the features upon which Applicants rely (i.e., direct absorption of the tablet) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).



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Applicants next allege that Fein does not teach or suggest the use of an acid in a compressed granulate tablet with desmopressin where the acid provides a pH in the range of 3.0 to 6.2, per the instant claims.

To this, the Examiner respectfully disagrees and directs Applicants to paragraphs [0051]-[0052] which teach that an “effervescent couple” produced by the combination of an acid source and a carbon dioxide source result in a disintegration reaction when reacted in the presence of an aqueous liquid such as saliva. Acids which are expressly taught as being included in the dosage form of Fein include, for example, tartaric and adipic acids ¶[0052]. As such, the teachings of Fein are considered by the Examiner as meeting the limitations of the instantly claimed acids which would convey the property of establishing the instantly claimed pH range, particularly in light of Applicants’ definition provided in the instant disclosure (MPEP §2111) concerning the definition of the acid (see pg. 3, line 34 to pg. 4, line 21). Further, in light of MPEP §2111.01, “[w]here the claimed and prior art products are identical or substantially identical in structure or composition ... a *prima facie* case of either anticipation or obviousness has been established” *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

Lastly, Applicants allege that “Fein discloses blister packaging only in connection with the preparation of a freeze-dried product which is not a compressed tablet of any kind” and that such packaging is illustrated (i.e. exemplified) in conjunction with storage of a freeze-dried product only. Applicants, as evidence, refer to the instant disclosure discussing the why Minirin<sup>®</sup> (e.g. desmopressin acetate) blister-packaged tablets were taken off the market. As such, Applicants assert that in light of this knowledge, the ordinarily skilled artisan “would have

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been discouraged from packaging desmopressin tablets in blister packs and Fein's teaching to freeze dried dosage forms in blister packs would not have convinced them otherwise."

The Examiner respectfully disagrees with the forgoing remarks and maintains that Fein is not solely limited to the packaging of lyophilized tablets, as asserted by Applicants. Rather, as discussed above, Fein expressly discloses preparing hard compressed tablets from protected desmopressin particles or granules ¶[0040]. Fein further teaches that the tablets which are prepared by the invention "have a sufficient strength for handling, which in practice may mean sufficient strength to withstand removal from a blister packaging without disintegrating" ¶[0033]. Furthermore, the invention is directed to the incorporation of desmopressin rather than desmopressin acetate [*emphases added*]. It is noted that the product which was removed from the market was the latter rather than the former. In light of these facts, the ordinarily skilled artisan would actually have been motivated to modify the composition to comprise a form of desmopressin which was free of acetate or the acetate form (e.g. desmopressin acetate), prepare particles of desmopressin, compress said particles into a tablet and package them in a blister pack, per the Fein reference. The motivation stems from the poor long-term storage stability of the acetate form in blister packaging.

For these reasons, Applicant's arguments are found unpersuasive. Said rejection is therefore **maintained** and extended to include newly filed claim 17. The new claim which is supported by the instant disclosure, further defines the acid of claim 1 such that it is selected from the following acids: stearic, acetic, phosphoric, adipic, tartaric, glutamic and aspartic acids. The Fein reference is considered as teaching the new limitation, as discussed above (see ¶[0052]).

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All claims under consideration remain rejected; no claims are allowed.

### CONCLUSION

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### CORRESPONDENCE

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey T. Palenik whose telephone number is (571) 270-1966.

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The examiner can normally be reached on 7:30 am - 5:00 pm; M-F (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax can be reached on (571) 272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey T. Palenik/  
Examiner, Art Unit 1615

/Carlos A. Azpuru/  
Primary Examiner, Art Unit 1615